



Materials Declaration Form

IPC Form Type *	1752 Distribute	Version	2
Sectionals *	Material Info Manufacturing Info	Subsectionals *	A-D <i>* : Required Field</i>

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2016-05-09
Contact Name *	Refer to "Supplier Comment" section	Contact Title	Refer to "Supplier Comment" section
Contact Phone *	Refer to "Supplier Comment" section	Contact Email *	Refer to "Supplier Comment" section
Authorized Representative *	Giovanni Giacobello	Representative Title	ADG MD CHAMPION
Representative Phone *	Refer to "Supplier Comment" section	Representative Email *	Refer to "Supplier Comment" section
Supplier Comment	Online Technical Support - STMicroelectronics : http://www.st.com/web/en/support/online_tech_support.html		

Uncertainty Statement


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Legal Statement			
Supplier Acceptance *	true	Legal Declaration *	Standard

Legal Statement

Supplier certifies that it gathered the provided information and such information is true and correct to the best of its knowledge and belief, as of the date that Supplier completes this form. Supplier acknowledges that Company will rely on this certification in determining the compliance of its products. Company acknowledges that Supplier may have relied on information provided by others in completing this form, and that Supplier may not have independently verified such information. However, in situations where Supplier has not independently verified information provided by others, Supplier agrees that, at a minimum, its suppliers have provided certifications regarding their contributions to the part(s), and those certifications are at least as comprehensive as the certification in this paragraph. If the Company and the Supplier enter into a written agreement with respect to the identified part(s), the terms and conditions of that agreement, including any warranty rights and/or remedies provided as part of that agreement, will be the sole and exclusive source of the Supplier's liability and the Company's remedies for issues that arise regarding information the Supplier provides in this form.

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
E-TDA7391PDTR	I977*L009DA6	A	MU1A	2016-05-09
Amount	UoM	Unit type	ST ECOPACK Grade	
1900.00	mg	Each	ECOPACK® 2	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
3	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NAC	Tin (Sn), matte, annealed	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
CHP	15.9x11x3.3	20	Flat	
Comment				

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
Product(s) meets EU RoHS requirement without any exemptions	false
Product(s) meets EU RoHS requirements except lead in solder and this usage may qualify under the lead in solder '7a' exemption (other selected exemptions may apply)	false
Product(s) meets EU RoHS requirements by application of the selected exemption(s)	true
Product(s) does not meet EU RoHS requirements and is not under exemptions	false
Product(s) is obsolete, no information is available	false
Product(s) is unknown, no information is available	false
Exemption Id.	Description
7a	Lead in high melting temperature type solders (i.e. lead- based alloys containing 85 % by weight or more lead)

QueryList : REACH-17th December 2015				
Query				Response
The product does not contain REACH Substances Of Very High Concern above the limits per the definition within REACH				true
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product

Material Composition Declaration						Mfr Item Name	I977*LD09DA6					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die	Other inorganic materials	9.318	mg	supplier	die	Silicon (Si)	7440-21-3		8.827	mg	947306	4646
Die				supplier	metallization	Aluminium (Al)	7429-90-5		0.135	mg	14488	71
Die				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.038	mg	4078	20
Die				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.072	mg	7727	38
Die				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.007	mg	751	4
Die				supplier	back side metallization	Gold (Au)	7440-57-5		0.018	mg	1932	9
Die				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.060	mg	6439	32
Die				supplier	glass coating	Glass: Silicon Dioxide (SiO2)	7631-86-9		0.072	mg	7727	38
Die				supplier	polymer die coating	PIX1 Gamma-butyrolactone	96-48-0		0.089	mg	9551	47
Leadframe	Copper & its alloys	628.497	mg	supplier	alloy	Copper (Cu)	7440-50-8		823.440	mg	993896	433389
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.825	mg	996	434
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.247	mg	298	130
Leadframe				supplier	metallization	Silver (Ag)	7440-22-4		3.985	mg	4810	2097
Die attach	Solder	6.565	mg	JIG - R	Soft solder	Lead (Pb)	7439-92-1	7a-Lead in high met	6.401	mg	975019	3369
Die attach				supplier	Soft solder	Silver (Ag)	7440-22-4		0.098	mg	14928	52
Die attach				supplier	Soft solder	Tin (Sn)	7440-31-5		0.066	mg	10053	35
Bonding wire	Precious metals	4.156	mg	supplier	wire	Gold (Au)	7440-57-5		4.156	mg	1000000	2187
encapsulation	Other inorganic materials	1041.507	mg	supplier	mold compound	Phenol Resin	205830-20-2		41.660	mg	40000	21926
encapsulation				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		31.245	mg	30000	16445
encapsulation				supplier	mold compound	epoxy resin	25068-38-6		31.245	mg	30000	16445
encapsulation				supplier	mold compound	carbon black	1333-86-4		2.083	mg	2000	1096
encapsulation				supplier	mold compound	Silica, vitreous	60676-86-0		935.274	mg	898001	492249
connections coating	Solder	9.957	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		9.957	mg	1000000	5241